



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,767	01/14/2004	Motoki Kyo	032084	1737
38834 7590 01/22/2007 WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP 1250 CONNECTICUT AVENUE, NW SUITE 700 WASHINGTON, DC 20036			EXAMINER CROW, ROBERT THOMAS	
			ART UNIT	PAPER NUMBER
			1634	
			MAIL DATE	DELIVERY MODE
			01/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/756,767	Applicant(s) KYO ET AL.	
	Examiner Robert T. Crow	Art Unit 1634	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 22 December 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

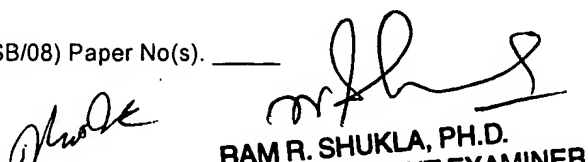
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: None.
Claim(s) objected to: None.
Claim(s) rejected: 17, 18, 20-27 and 29-33.
Claim(s) withdrawn from consideration: 1-16 and 34-42.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____


RAM R. SHUKLA, PH.D.
SUPERVISORY PATENT EXAMINER

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues on page 13 of the Remarks filed 22 December 2006 that Corn et al do not teach a linking polymer that is hydrophilic.

However, hydrophilicity is defined in paragraph 0067 on page 12 of the specification as meaning "water soluble or having water solubility." No lower limit for water solubility is defined by the specification; thus, any crosslinking molecule having any water solubility is hydrophilic as defined by the specification. In addition, the claimed hydrophilicity is not limited to any one section of claimed polymer having the generic formula X-R-Y. Therefore, a polymer having at least one hydrophilic group in either X, Y, or R provides at least some degree of water solubility to the polymer as a whole. The cited polymer of Corn et al has a thio group at its terminus, and thus has at least some water solubility, thereby meeting the definition of hydrophilic provided by the specification.

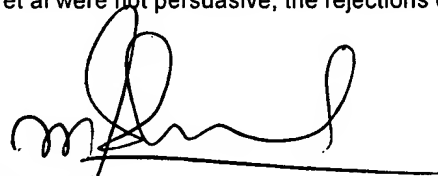
In addition, amended claim 17 (previous claim 18) is drawn to an oligonucleotide bonded to said substrate "by use of a cross-linking agent including a heterobifunctional hydrophilic polymer molecule." The limitation "by use of" allows the reasonably broad interpretation of a polymer having a hydrophilic group before the reaction that is not required to be present after the crosslinking reaction. Therefore, the MUAM polymer of Corn et al, which comprises both the hydrophilic amino group (column 7, lines 53-54) and the hydrophilic thio group is used to bond the oligonucleotide to the substrate.

Finally, Corn et al teach an alternate embodiment wherein thiolated DNA is linked via SSMCC to an 11-mercaptoundecanoic acid/poly-L-lysine linker (column 9, lines 19-21). Polylysine is hydrophilic.

Applicant further argues on page 15 of the Remarks that the teachings of Corn et al and Bambad et al are conflicting because Applicant believes Corn et al do not teach a hydrophilic polymer.

However, as stated above, Corn et al teach a polymer that is hydrophilic. Thus, the references are not conflicting.

Applicant's remaining arguments rely on arguments set forth to address the alleged deficiencies of Corn et al. Applicant present no further arguments that have not already been addressed. Since the arguments regarding Corn et al were not persuasive, the rejections of the remaining claims are maintained. .



RAM R. SHUKLA, PH.D.
SUPERVISORY PATENT EXAMINER

